



UNITED STATES PATENT AND TRADEMARK OFFICE



COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/874,666	06/05/2001	Suresh Ramalingam	42390P7045D

CONFIRMATION NO. 6757

FORMALITIES LETTER



OC00000006227942

08791

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD, SEVENTH FLOOR
LOS ANGELES, CA 90025

Date Mailed: 06/26/2001

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

RECEIVED

OCT 11 2001

OFFICE OF PETITIONS
DEPUTY A/C PATENTS

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.
A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is \$ 130.**

*A copy of this notice **MUST** be returned with the reply.*

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

11/05/2001 ADSMAN1 00000002 022666 09874666

01 FC:105 130.00 CH



#3

Our Docket No.: 42390P7045D

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Ramalingam, et al.

Application No.: 09/874,666

Filed: June 5, 2001

For: Controlled Collapse Chip Connection
(C4) Integrated Circuit Package Which
has Two Dissimilar Underfill Materials

Examiner:

Art Group:

RECEIVED

OCT 11 2001

OFFICE OF PETITIONS
DEPUTY A/C PATENTSPETITION TO REQUEST WAIVER OF DECLARATION SURCHARGEAssistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Applicants have received a Notice to File Missing Parts of Nonprovisional Application for the above-identified U.S. Patent Application (copy enclosed). The Notice indicates that the oath or declaration was missing; however, the Declaration and Power of Attorney was filed with the Application papers as is evidenced by the attached copy of the transmittal and return postcard stamped by the U.S. Patent & Trademark Office. Accordingly, we are submitting herewith a Response to the Notice of Missing Parts, together with a second copy of the Declaration; however, Applicants respectfully request that the \$130.00 surcharge be waived as the Declaration was properly submitted.

7/10/2001 2:48:10 PM JCS/LEY
TO: ASST. COM. FOR PATENTS
FROM: JCS/LEY
SUBJECT: 09/874,666
RE: 09/874,666

Please direct all communications regarding this matter to the undersigned.

Respectfully submitted,

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP

Dated: 8/9/01

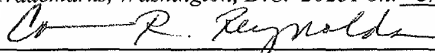


WILLIAM W. SCHAAL
Reg. No. 39,018

12400 Wilshire Boulevard, Seventh Floor
Los Angeles, California 90025
(714) 557-3800

CERTIFICATE OF MAILING

*I hereby certify that this correspondence is being deposited
with the United States Postal Service as first class mail in
an envelope addressed to: Commissioner of Patents and
Trademarks, Washington, D.C. 20231 on: 8/9/01*



Corinn R. Reynolds 8/9/01

Please type a plus sign (+) inside this box



AUG 13 2001

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTO/SB/05 (11-00)

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Approved for use through 10/31/2002. OMB 0651-0032

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

42390P7045D

First Inventor

Suresh Ramalingam

Title

CONTROLLED COLLAPSE CHIP CONNECTION (C4) INTEGRATED

Express Mail Label No.

EL802873113US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents

ADDRESS TO:

Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 16]
(preferred arrangement set forth below)
 - Descriptive title of the Invention
 - Cross References to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 2]
5. Oath or Declaration [Total Pages 3]
 - a. ☐ Newly executed (original or copy)
 - b. ☒ Copy from a prior application (37 C.F.R. § 1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. ☐ DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 C.F.R. § 3.73(b) Statement (when there is an assignee) ☐ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☐ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:

☐ Continuation ☒ Divisional ☐ Continuation-in-part (CIP) of prior application No: 09/261,849

Prior application Information: Examiner D. Graybill Group/Art Unit: 2812

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

18. CORRESPONDENCE ADDRESS

☒ Customer Number of Bar Code Label



08791

PATENT TRADEMARK OFFICE

(Insert Customer No. or Attach bar code label here)

or ☐ Correspondence address below

Name

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type)

William W. Schaal

Registration No. (Attorney/Agent)

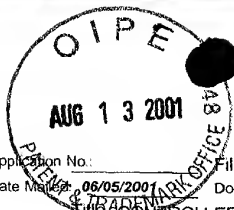
39,018

Signature

Date

06/05/01

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.



Application No. _____ Filing Date: **06/05/01** BSTZ Docket #: **042390.P7045D** Atty/Sec: **WWS/crr**
Date Mailed: **06/05/2001** Docket Due Date: _____ Client: **Intel Corporation**

UNCONTROLLED COLLAPSE CHIP CONNECTION (C4) INTEGRATED CIRCUIT PACKAGE WHICH HAS TWO DISSIMILAR UNDERFILL MATERIALS

Inventor(s) **Ramalingam, Murali, Cook**

The following has been received in the U.S. Patent & Trademark Office on the date stamped hereon:

- | | |
|---|--|
| <input type="checkbox"/> Amendment/Response (_____ pgs) | <input type="checkbox"/> Information Disclosure Statement & PTO-1449 (_____ pgs) |
| <input type="checkbox"/> Amendment/Response After Final (_____ pgs) | <input type="checkbox"/> Issue Fee Transmittal (original & copy) |
| <input type="checkbox"/> Appeal Brief & two copies (_____ pgs each) | <input type="checkbox"/> Notice of Appeal |
| <input checked="" type="checkbox"/> Rule 1.53(b) Application: <u>Divisional</u> | <input type="checkbox"/> Petition for Extension of Time _____ |
| (_____ 17 pages w/ cover & abstract) | <input type="checkbox"/> Petition for _____ (_____ pgs) |
| <input type="checkbox"/> Assignment & Cover Sheet (_____ pgs) | <input type="checkbox"/> Power of Attorney (_____ pgs) |
| <input type="checkbox"/> Certificate of _____ | <input checked="" type="checkbox"/> Preliminary Amendment (_____ 13 pgs) |
| <input checked="" type="checkbox"/> Declaration & POA (_____ 3 pgs) | <input type="checkbox"/> Request and Certification Under 35 U.S.C. 122(b)(2)(B)(i) |
| <input type="checkbox"/> Disclosure Docs & Inv's Signed Ltr | <input type="checkbox"/> Reply Brief (_____ pgs) |
| <input checked="" type="checkbox"/> Drawings: <u>2</u> sheets, <u>4</u> figures | <input type="checkbox"/> Response to Notice of Missing Parts & PTO-1533 (_____ pgs) |
| <input checked="" type="checkbox"/> Express Mail No. EL802873113US | <input type="checkbox"/> Supplemental Amendment (_____ pgs) |
| <input checked="" type="checkbox"/> Fee Transmittal (original & copy) | <input checked="" type="checkbox"/> Transmittal Letter |
| <input type="checkbox"/> Other _____ | <input checked="" type="checkbox"/> Check No. <u>1</u> <u>12072</u> Amount <u>\$790.00</u> |
| | <input type="checkbox"/> Check No. <u>2</u> Amount _____ |
| | <input type="checkbox"/> Check No. <u>3</u> Amount _____ |

U.S. PTO
09/874666
06/05/01

v5.2

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OCT 11 2001



**POST OFFICE
TO ADDRESSEE**



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PO ZIP Code 92626	Day of Delivery <input checked="" type="checkbox"/> Next <input type="checkbox"/> Second	Flat Rate Envelope <input type="checkbox"/>
Date In 6501	<input checked="" type="checkbox"/> 12 Noon <input type="checkbox"/> 3 PM	Postage \$
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METHOD OF PAYMENT: Express Mail Corporate Acct. No. 714 357 3900	
FROM: (PLEASE PRINT) STANLEY SORLOFF TAYLOR & FREEMAN LLP 1300 PARK CENTER DR STE 700 COSTA MESA CA 92626-7149	PHONE () _____

<input type="checkbox"/> WAIVER OF SIGNATURE (Domestic Only). Additional merchandise insurance is void if waiver of signature is requested. I wish delivery to be made without obtaining signature of addressee or addressee's agent (if delivery employee judges that article can be left in secure location) and I authorize that delivery employee's signature constitutes valid proof of delivery.	
<input type="checkbox"/> NO DELIVERY <input type="checkbox"/> Weekend <input type="checkbox"/> Holiday	
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FOR PICKUP OR TRACKING CALL 1-800-222-1811 www.usps.com

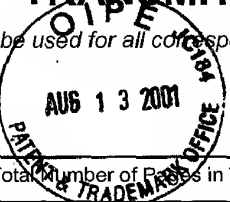


Receipt

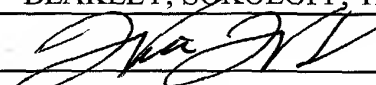
PTO/SB/21 (12/97)

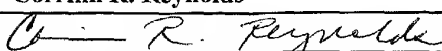
Approved for use through 9/30/2000. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM (to be used for all correspondence after initial filing) 		Application No.	09/874,666
		Filing Date	June 5, 2001
		First Named Inventor	Suresh Ramalingam
		Group Art Unit	2812
		Examiner Name	D. Graybill
Total Number of Pages in This Submission	6	Attorney Docket Number	42390P7045D

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> To Convert a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Additional Enclosure(s) (please identify below): <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Request for Correction of Filing Receipt; Copy of Express Mail Label </div>
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	William W. Schaal, Reg. No. 39,018 BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Signature	
Date	August 8, 2001

CERTIFICATE OF MAILING/TRANSMISSION			
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class mail with sufficient postage in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on: August 8, 2001			
Typed or printed name	Corrinn R. Reynolds		
Signature		Date	August 8, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box



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PTO/SB/17 (12/99)
Approved for use through 09/30/2000. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

FEE TRANSMITTAL for FY 2000

Patent fees are subject to annual revision.

AUG 13 2001

Complete if Known

Application No. 09/874,666
Filing Date June 5, 2001
First Named Inventor Suresh Ramalingam
Examiner Name D. Graybill
Group/Art Unit 2812
Attorney Docket No. 42390P7045D

TOTAL AMOUNT OF PAYMENT (\$) 80.00

METHOD OF PAYMENT (check one)

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number 02-2666

Deposit Account Name Blakely, Sokoloff, Taylor & Zafman LLP

- ☒ Charge Any Additional Fee(s) Required Under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.

- ☐ Applicant claims small entity status. See 37 CFR 1.27.

2. ☐ Payment Enclosed:

☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	710	201	355	Utility filing fee	
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	

SUBTOTAL (1) (\$) 80.00

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
19	20	18.00	0
4	3	80.00	\$80.00

Multiple Dependent

**or number previously paid, if greater. For Reissues, see below

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
103	18	203	9	Claims in excess of 20	
102	80	202	40	Independent claims in excess of 3	
104	260	204	135	Multiple Dependent claim, if not paid	
109	80	209	40	**Reissue independent claims over original patent	
110	18	210	9	**Reissue claims in excess of 20 and over original patent	

SUBTOTAL (2) (\$) 80.00

FEE CALCULATION (continued)

3. ADDITIONAL FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet.	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for response within first month	
116	390	216	195	Extension for response within second month	
117	890	217	445	Extension for response within third month	
118	1,390	218	695	Extension for response within fourth month	
128	1,890	228	945	Extension for response within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	710	246	355	Filing a submission after final rejection (37 CFR 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify)

Other fee (specify)

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 80.00

SUBMITTED BY

Complete (if applicable)

Name (Print/Type) William W. Schaal
Registration No. 39,018
Telephone (714) 557-3800
Signature [Signature]
Date 08/09/01

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2039.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED



Docket No.: 42390P7045D

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Ramalingam, et al.

Application No.: 09/874,666

Filed: June 5, 2001

For: Controlled Collapse Chip Connection
(C4) Integrated Circuit Package Which
has Two Dissimilar Underfill Materials

Examiner:

Art Group:

RECEIVED
OCT 11 2001

RESPONSE TO NOTICE TO FILE MISSING PARTS

OFFICE OF PETITIONS
DEPUTY A/C PATENTS

BOX MISSING PARTS

Assistant Commissioner for Patents
Washington, DC 20231-9998

Sir:

In response to the Notice to File Missing Parts of Application mailed June 26, 2001,
please find enclosed a duly executed Declaration and Power of Attorney with respect to the
above-referenced patent application.

08/15/2001 BSAYASI1 00000025 022666 09874666


01 FC:102 80.00 CH

The Commissioner is hereby authorized to charge the \$130.00 surcharge fee to deposit account no. 02-2666, if deemed necessary after consideration of the Petition enclosed herewith.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

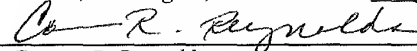
Dated: August 9, 2001


WILLIAM W. SCHAAL
Reg. No. 39,018

12400 Wilshire Boulevard, Seventh Floor
Los Angeles, California 90025
(714) 557-3800

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on: August 9, 2001.


Corrin R. Reynolds

8/9/01
Date